FEMP
Experience in Russia

MARKET FOR ENERGY SAVING SERVICES: state of the art

- **Undeveloped normative and legislative bases (both on federal and regional levels), which stimulates investments into energy saving in economic and budgetary sectors**

- **Absence of specialised financial institutions (Banks) that render financing for energy saving programmes and understand financial models for energy saving and those that have positive experience in projects implementation.**

MARKET FOR ENERGY SAVING SERVICES: state of the art

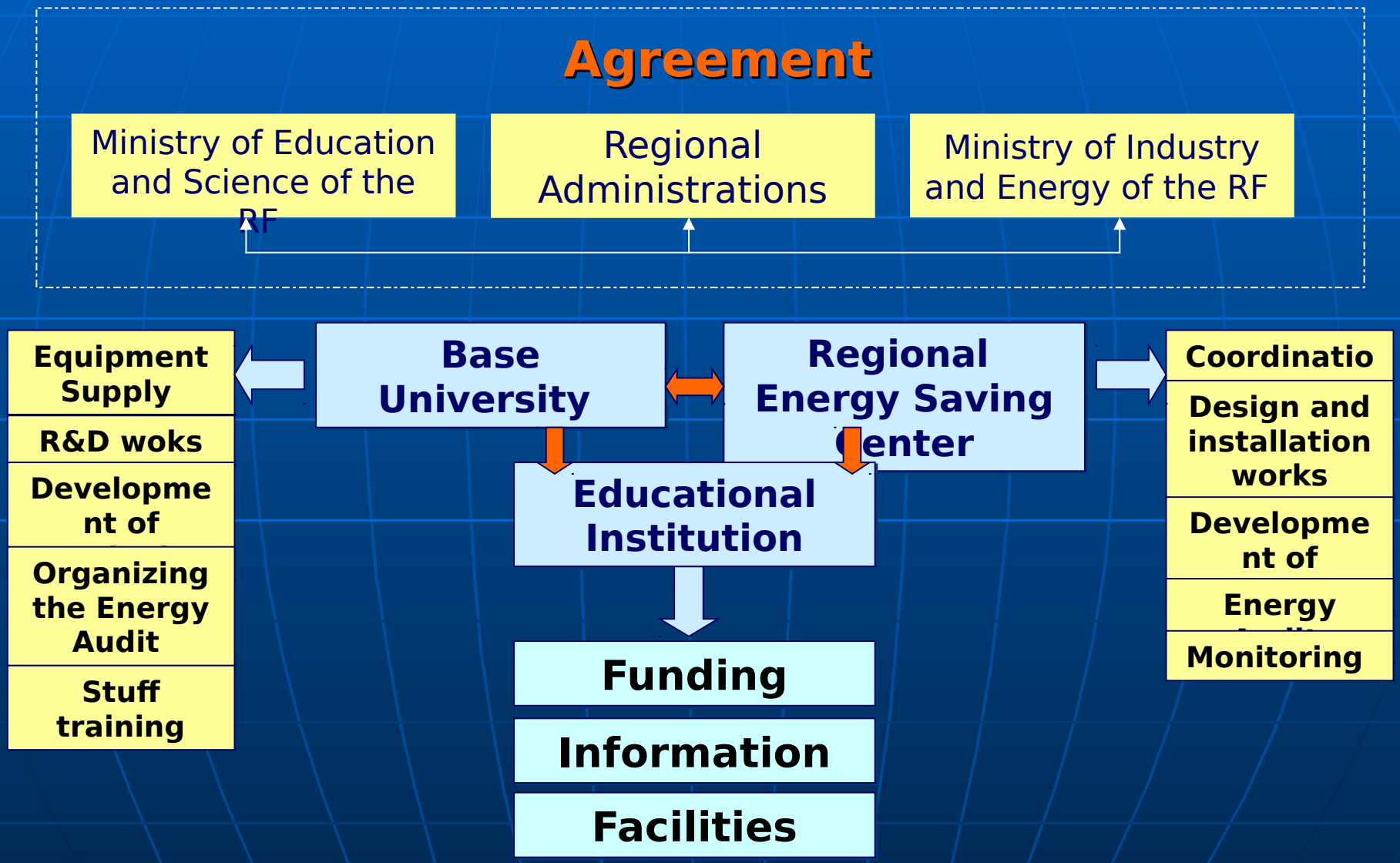
- Large companies started to create specialised “daughter” structures (GsEnergo and ect.)

- A lot of offers to install ASEM (АСКУЭ), conduction of audits and etc

- A lot of offers on supply of energy efficient equipment (from Russian and foreign producers)

In 1999 the College of the Ministry of Education sanctioned the establishment of a complex program on saving and rational use of energy resources in educational institutions

Project management and finance scheme



1 Stage

- Assessment of the energy saving potential of educational establishments

- Formation of the infrastructure for development, finance and implementation of energy saving projects

- Creation of the energy management system for educational establishments on the basis of leading Universities of the region

- Development of model fast pay back energy saving measures and their dissemination in educational institutions of the Ministry of Education of Russia

Regional Energy Saving Centers at Universities

North-Western FD

- ESC within the Arkhangelsk State University (SU).
- ESC within the Murmansk SPU.
- Educational-scientific ESC within the Novgorod SU.
- ESC within the Petrozavodsk SU.
- Interuniversity ESC on a basis of the St. Petersburg SEU.
- Institute 'Energy Saving" within the Vologda STU.
- regional ESC within the Ukhta STU.

Urals FD

- ESC within the South Urals SU.
- RESC within Ural STU

Siberia FD

- Regional Innovation ESC within the Altai STU.
- CENEf of the Krasnoyarsk STU.
- Regional ESC at the Novosibirsk STU.
- Technical Center "Energy" within the Omsk STU.
- Regional Scientific Technical [illegible] within the Tomsk STU.
- Regional ESC within Irkut[illegible]

Central FD

- STESC within the MEI (TU).
- STK "Energy saving" within the Belgorod STA of building materials.
- ESC of the Ivanovo SEU.
- Regional ESC within the Kostroma STU.
- Innovation ESC within the Kursk STU.
- Regional ESC within the Orel STU.
- ESC of the Tambov STU.
- Center "Energy efficiency" within the Tver STU.
- Educational-technical Center "Energy efficiency" of the Tula SU.
- Laboratory of energy audit and resource saving within the

Southern FD

- Regional ESC within the Volgograd STU.
- ESC of the Southern-Russia STU.

Privolzhskiy FD

- NICE within the Nizhny Novgorod State Technical University (STU).
- ESC Tatarstan within the Cabinet of Ministers of Republic of Tatarstan.
- Innovation ESC within the of Saratov STU.
- ESC within the Samara STU.
- ESC within the Ufimskiy Oil STU.
- Scientific-educational ESC within the Perm STU.
- ESC within the Vyatka SU.

Far-East FD

- ESC within the Far-East SAEU

Regional Energy Saving Centers of the Privolzhsky Federal District

ESC within Vyatka SU

Scientific-educational ESC within the Perm STU

NICE within the Nizhny Novgorod State Technical University

Udmurt ESC of the Izhevsk STU

Energy Saving Technologies Center within Kazan STU

ESC within the Ufa Oil STU

Innovation ESC within the of Saratov STU

ESC within the Samara STU

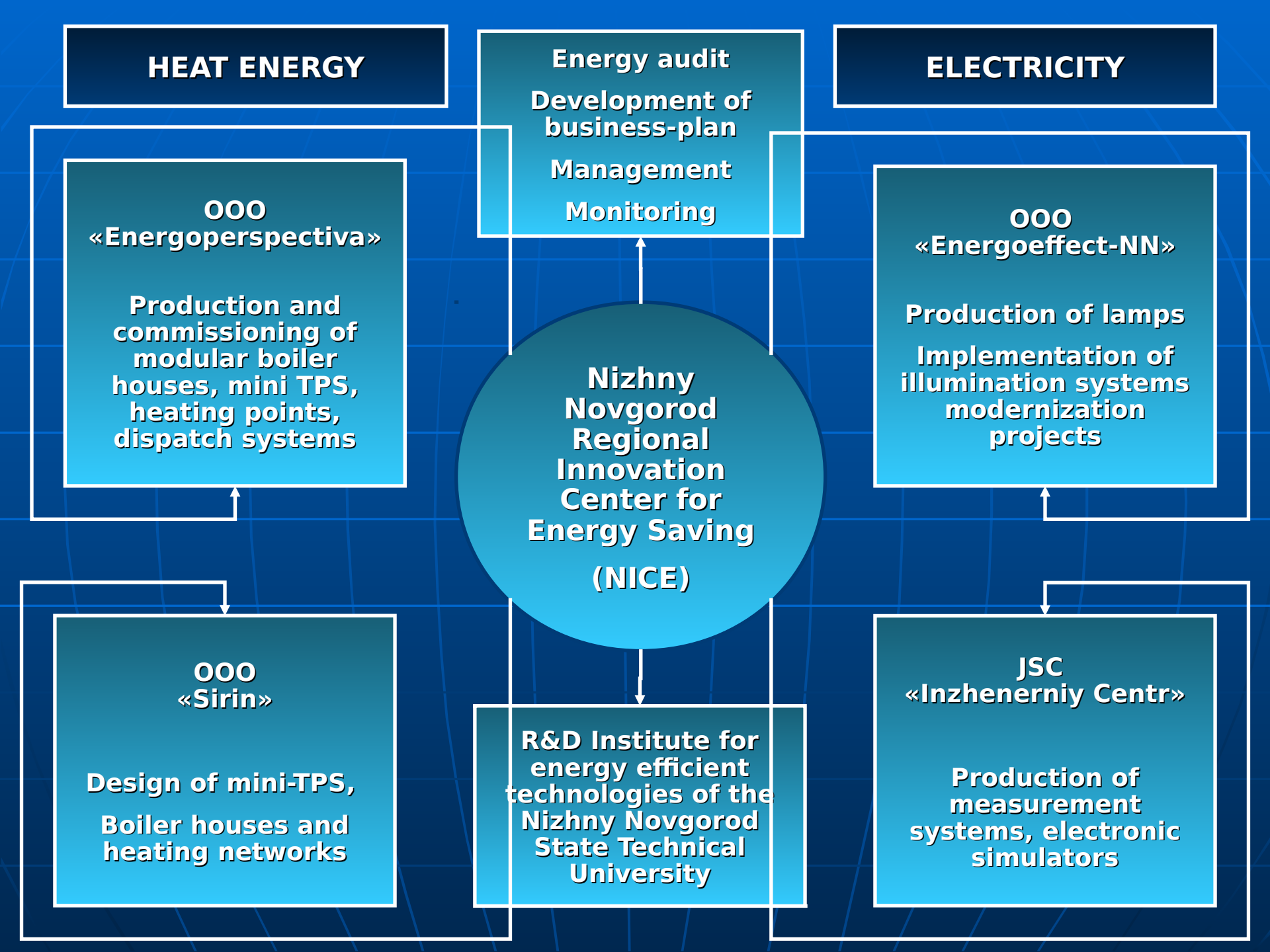
2 Stage

- Capacity building and vocational training for experts dealing with energy saving in educational establishments

- Development of training technologies on energy conservation and climate change for teachers and children

763 Russian educational institutions where energy saving measures were implemented during 5 years.

The amount of funds raised during 5 years totals to more than $40 million.


HEAT ENERGY
Energy audit
Development of business-plan
Management
Monitoring
ELECTRICITY
OOO «Energoperspectiva»
Production and commissioning of modular boiler houses, mini TPS, heating points, dispatch systems
OOO «Energoeffect-NN»
Production of lamps
Implementation of illumination systems modernization projects
Nizhny Novgorod Regional Innovation Center for Energy Saving (NICE)
OOO «Sirin»
Design of mini-TPS,
Boiler houses and heating networks
R&D Institute for energy efficient technologies of the Nizhny Novgorod State Technical University
JSC «Inzhenerniy Centr»
Production of measurement systems, electronic simulators

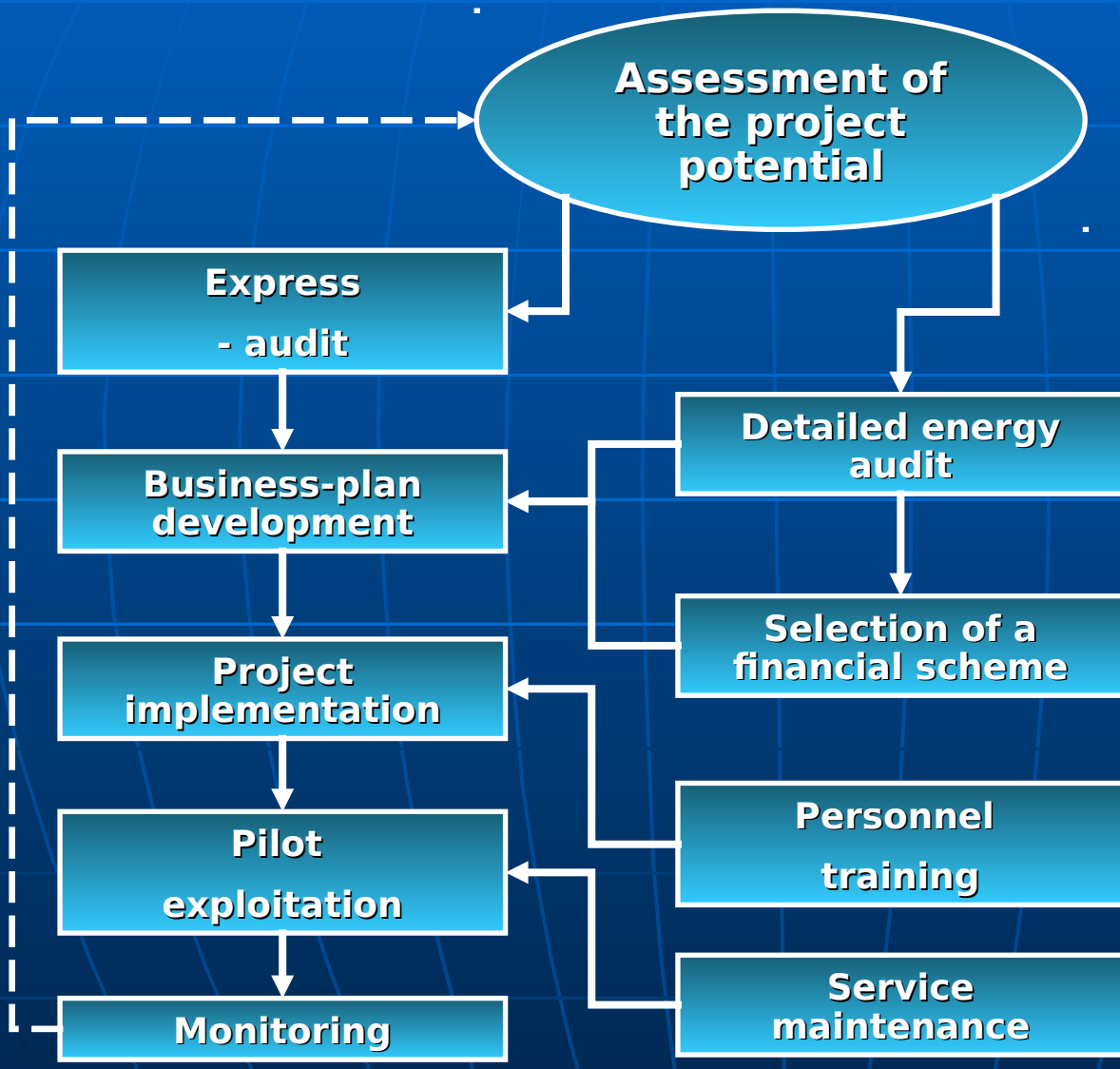
CHARACTERISTICS OF PROSPECTIVE DIRECTIONS ON ENERGY SAVING

- Construction of mini-TPS for electricity and heat production.

- Installation of new-generation block-modular boiler houses

- Installation of automatic individual heating points (AIHP) in heat supply systems for residential and budgetary facilities.

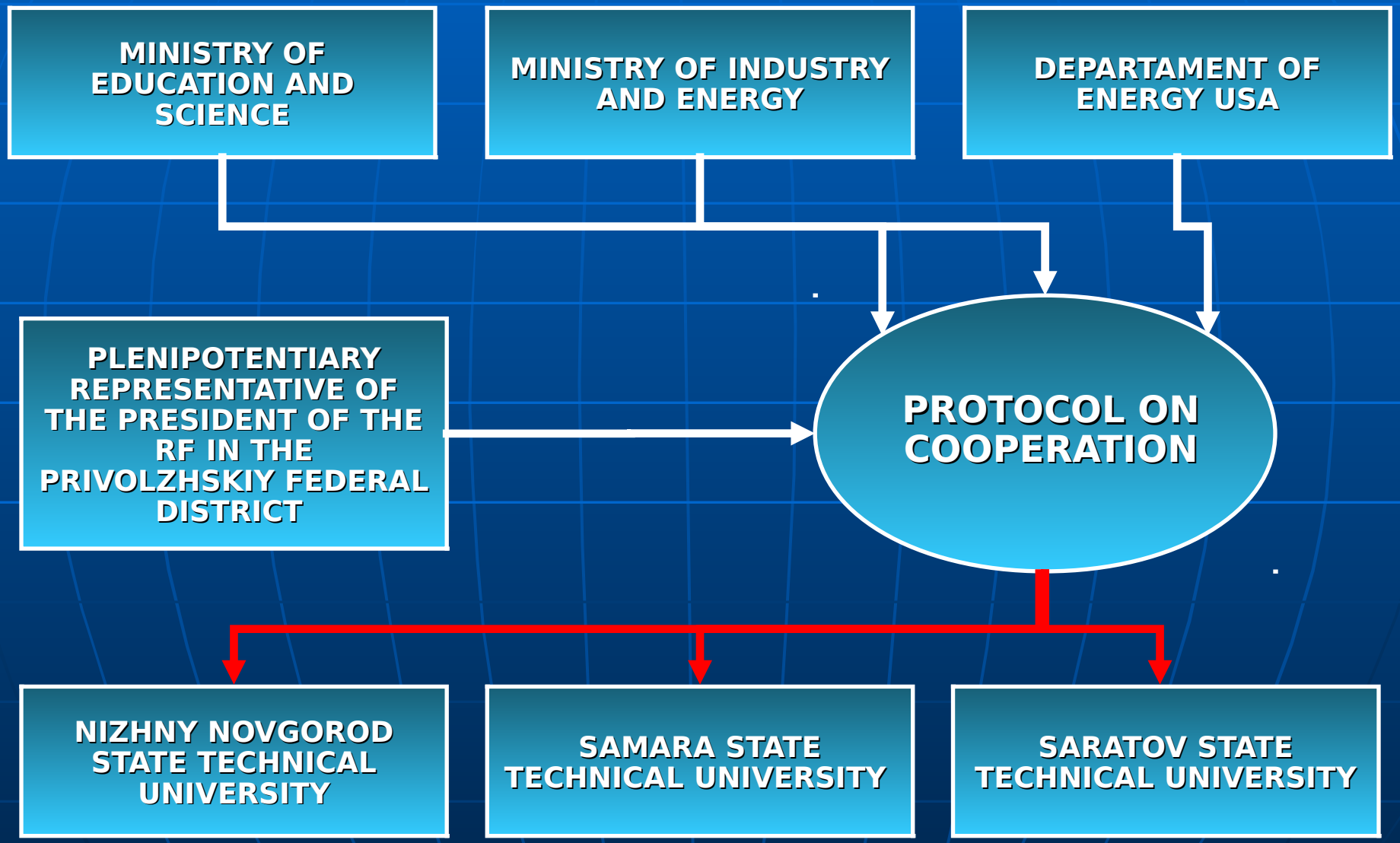
PROJECTS IMPLEMENTATION STRUCTURE



ESCO DIRECTIONS OF ACTIVITIES

- Autoimmunization of accounting, control and regulation of energy resources flows.
- Development of investment feasibility studies (technical-economic substantiation, business-plan) for implementation of energy efficiency projects and programmes.
- Conduction of independent energy audit of enterprises from various economic sectors.
- Conduction of expertise (investigation) of projects, equipment, technological solutions and etc. as regard to energy use and energy saving.
- Proposals on optimization of schemes, technologic solutions and application of energy saving equipment
- Incorporation of non-used alternative energy resources, facilities, utilizers and etc.

COOPERATION UNDER FEMP


MINISTRY OF EDUCATION AND SCIENCE
MINISTRY OF INDUSTRY AND ENERGY
DEPARTAMENT OF ENERGY USA
PLENIPOTENTIARY REPRESENTATIVE OF THE PRESIDENT OF THE RF IN THE PRIVOLZHSKIY FEDERAL DISTRICT
PROTOCOL ON COOPERATION
NIZHNY NOVGOROD STATE TECHNICAL UNIVERSITY
SAMARA STATE TECHNICAL UNIVERSITY
SARATOV STATE TECHNICAL UNIVERSITY

ENERGY EFFICIENCY PROJECT - VOLGA REGION

Start of the project: October 2005

- A technical assistance (TA) initiative to promote investments in energy efficiency technologies in the Russian Volga region
- IFC' Private Enterprise Partnership in cooperation with the Free State of Saxony, Germany
- The Project will run in parallel to the larger Russia Sustainable Energy Finance Investment and TA Programme (RSEF) presently being implemented by IFC with funding from The GEF, the Governments of Denmark and Finland, and the IFC Sustainable Financial Markets Facility

ENERGY EFFICIENCY PROJECT - VOLGA REGION

Objectives of the Project:

- Identify a solid pipeline of Energy Efficiency/Clean Production projects in the Volga region;
- Market these investment opportunities to local financial institutions, and
- Promote investments in energy efficiency or cleaner production through educational events for companies and financial institutions in the Volga region

THANK YOU !